### RECORDS OF GEORGIA AND FLORIDA ORTHOPTERA, WITH THE DESCRIP-TIONS OF ONE NEW SPECIES AND ONE NEW SUBSPECIES.

### BY JAMES A. G. REHN AND MORGAN HEBARD.

The following records are based almost entirely on material belonging to the collection of the State of Georgia contained in the State House at Atlanta. This series was submitted to us for examination through the kind services of Mr. J. Chester Bradley, of Cornell University, who collected a large proportion of the specimens. Where no collection is indicated in the following pages the material belongs to the State series, and unless otherwise stated the localities given are in Georgia. A considerable proportion of the species here treated are recorded for the first time from Georgia or Florida, while our knowledge of several of the species has until this date rested on but one or two records.

The new *Chortophaga* is a rather widely distributed form in the Gulf region, while the new *Nemobius* is apparently a localized type.

# DERMAPTERA.

### LABIIDÆ.

Labia minor (Linnæus).

Atlanta, September 19, 1908. One male.

This species has been recorded from Thomasville.<sup>1</sup>

Labia burgessii Scudder.

Brunswick, April 8. One male.

The United States records for this species, aside from one from Massachusetts no doubt due to accidental introduction, are all from southern and eastern Georgia and Florida and central Alabama.

### Anisolabis annulipes (H. Lucas).

St. Simon's Island, September 8, 1904. One female. Tybee Island, June 30 (Dr. D. M. Castle.) One male, one female.

The only previous record of the species from Georgia was from Thomasville.

#### ORTHOPTERA.

#### BLATTIDÆ.

# Ischnoptera uhleriana fulvescens Sauss. & Zehntn.

Fernandina, Fla. One male.

Isohnoptera borealis Brunner.

Fernandina, Fla. Two males.

Ischnoptera bolliana Sauss. & Zehntn.

Brunswick. One male.

Atlanta, July 6, 1909. One female.

Blattella germanica (Linnæus).

Brunswick. One female.

Blatta orientalis Linnæus.

Atlanta, July 25, 1908. One female.

### Periplaneta americana (Linnæus).

Bainbridge, July 15–27, 1909. (J. C. Bradley.) Three males, one female.

Jacksonville, Fla., September 11. Two females.

### Periplaneta brunnea Burmeister.

Bainbridge, July 15–27, 1909. (J. C. Bradley.) One male, two females.

Jacksonville, Fla., September 11. One female.

This species has previously been reported from Jacksonville and Thomasville, Ga., as well as Victoria, Tex.

#### Chorisoneura plocea Rehn.

Marietta, June 7, 1909. One female.

This is but the second specimen known of this species which was originally described from the coast of South Carolina. The pronotum of the Marietta specimen has a meso-caudal patch and a pair of subarcuate lateral bars of dark brown.

### Cryptocercus punctulatus Scudder.

Rome, August 31. One female.

Clayton, August 18. One male.

These are the first records of the species from Georgia. The localities show that the species is essentially one of the Appalachian region, as far as its range east of the Sierra Nevada is concerned.

#### MANTIDÆ.

### Stagmomantis carolina (Johannson).

Bainbridge, July 15–27, 1902. (J. C. Bradley.) Two immature individuals.

Tallapoosa, July 24, 1908. One immature individual.

Thesprotia graminis (Scudder).

Bainbridge, July 15-27, 1909. (J. C. Bradley.) One adult male.

586

#### PHASMIDÆ.

#### Diapheromera femorata (Say).

Jasper, October 31, 1907. One female.

This is the most southern exact record known for the species, and on comparison with Pennsylvania material no difference is noticed. A female specimen from Greenville, South Carolina, has also been examined.

## ACRIDIDÆ.

Acrydium arenosum (Burmeister).

Bainbridge, July 15–27, 1909. (J. C. Bradley.) Three males.

Neotettix femoratus Scudder.

Chester, May 26, 1904. One female.

Bainbridge, July 15–27, 1909. (J. C. Bradley.) Two males. All three specimens are short-winged.

#### Paxilla obesa (Scudder).

Gardi, Wayne County, April 7, 1902. Two females.

This is the first definite Georgia record for the species, which was originally described from that State without specified exact locality.

#### Tettigidea lateralis (Say).

Chester, May 26 and June 2, 1904. Two females.

Truxalis brevicornis (Johannson).

Atlanta, August 14, 1909. One male.

Rome, August 31. One male.

Toccoa, August 15. One male, one female.

### Syrbula admirabilis (Uhler).

Dalton, August 29. One male.

# Amblytropidia occidentalis (Saussure).

Albany, March 28. One male.

# Orphulella olivacea (Morse).

St. Simon's Island, September 8 and 9, 1909. Two females.

One of these specimens is extremely large when compared with individuals from Connecticut or New Jersey, measuring as follows: length of body, 28.5 mm.; length of pronotum, 5.2; length of tegmen, 25; length of caudal femur, 17.5. The other individual is similar to the normal size of the species as exemplified by topotypic material from the two above-mentioned States.

## Orphulella pelidna (Burmeister).

Waynesville. Three males, six females. Tallulah Falls, August 3, 1909. One female. Chester, May 30 to June 16, 1904. Two males, one female. Bainbridge, July 15–27, 1909. (J. C. Bradley.) Two females.

St. Simon's Island, September 8-9, 1909. Two males.

### Dichromorpha viridis (Scudder).

Bainbridge, July 15–27, 1908. (J. C. Bradley.) One male.

Okefenokee Swamp, September 11. (J. C. Bradley.) One male, four females.

Wavnesville. One female.

Two of the females from the Okefenokee Swamp are macropterous, the other specimens being of the more usual brachypterous type.

This species has been recorded from Savannah, Tybee Island, Thomasville, Waycross and West Point, Ga.

# Clinocephalus elegans pulcher (Rehn and Hebard).

St. Simon's Island, September 8, 1909. One male.

This specimen greatly resembles individuals of the same sex from Cedar Keys, Fla.

### Arphia granulata Saussure.

Waynesville. Two males, one female.

This is the second record for the species from Georgia, the first being from Thomasville.

#### Arphia xanthoptera (Burm.).

Austell, September 6. Two males.

The only previous Georgia records are from Sand Mountain. Thomasville and Waycross.

#### Arphia sulphurea (Fabr.).

Brunswick, April 6, 1902. One male, one female.

The previous exact Georgia records are from Sand Mountain, Jasper and Thomasville.

#### Chortophaga viridifasciata (De Geer).

Toccoa, August 15. One male.

Dalton, August 29. One female.

Atlanta, July 31, 1909. One female.

Halls, June 7, 1906. One female.

Austell, September 6. One male.

Marshallville, May 5, 1902. One female.

The Halls and Marshallville specimens are in the green phase. Marshallville is the most southern locality from which we have seen true *viridifasciata*, all the other references from localities to the southward prove, as fai as we have been able to examine them, to belong to the following species. 1910.]

#### Chortophaga australior n. sp.

1905.1 Chortophaga viridifasciata Rehn and Hebard (not of DeGeer), Proc. Acad. Nat. Sci. Phila., 1904, p. 786. [Thomasville, Ga.] 1905. Chortophaga viridifasciata Rehn and Hebard (not of DeGeer), ibid.,

ville, Fla.]

Types:  $\overline{\mathcal{O}}$  and  $\mathcal{Q}$ : Thomasville, Thomas County, Ga. December 10, 1902. (Morgan Hebard.) [Acad. Nat. Sci. Phila.]

This species is closer related to C. cubensis than to C. viridifasciata and C. meridionalis, differing from *cubensis* in the following particulars: the male sex has the fastigium less excavate, the eyes less prominent. the caudal portion of the disk of the prozona less bullate and the median carina of the pronotum more uniformly elevated and less broadly severed: the female has the median carina of the pronotum more arcuate and very narrowly severed, the caudal femora slenderer and the form more compressed (in this respect resembling viridifasciata).

From C. viridifasciata the new form differs in the less strongly keel-like median carina of the pronotum, in the less acute angle of the caudal margin of the pronotum, in the broader fastigium and in the markedly different color pattern, which is essentially that of C. cubensis.

Size medium; form moderately compressed. Head with the occiput moderately arcuate; fastigium considerably declivent, acuteangulate cephalad, the very narrow apex passing into the frontal costa, the male having the cephalic angle much sharper and the fastigial width much less than in the female, the latter with the width slightly more than the length, disk slightly excavated; lateral foveolæ trigonal, not excavate; facial outline nearly straight ( $\vec{O}$ ) or slightly arcuate  $(\mathcal{Q})$ , subangulate with the fastigium in the male, rounded in the female; frontal costa rather narrow, considerably constricted dorsad of the insertion of the antennæ, slightly so ventrad of the same, moderately expanding toward the clypeal suture, sulcate for a distance ventrad of the ocellus, punctate dorsad; eves rather prominent in the male, hardly so in the female, reniform-ovate in shape, the length subequal to  $(\mathcal{Q})$  or slightly exceeding  $(\mathcal{O})$  that of the infra-

<sup>&</sup>lt;sup>1</sup> Probably the following refer to this species:

<sup>1904.</sup> Chortophaga viridifasciata Morse, Publ. No. 18, Carneg. Inst. Wash., p. 33. (Part.) 1905. Chortophaga viridifasciata Caudell, Ent. News, XVI, p. 217. [Key

West and Palm Beach, Fla.]

ocular sulcus; antennæ subdepressed, the apex more so than the proximal and median portions and very slightly expanded. Pronotum



Fig. 1. — Chortophaga australior n. sp. Lateral outline of head and pronotum of female type. (×2.) with the median carina considerably elevated, subcristate, not or slightly arcuate cephalocaudad, the intersection of the principal sulcus being very appreciable, though not deeply severing the crest; lateral carinæ irregular, composed chiefly of tubercles, broken mesad; cephalic margin of the disk obtuse-angulate, caudal margin of the disk rectangulate to slightly acute-angulate; lateral lobes with the greatest depth about equal to the greatest length. Tegmina surpassing the tips of the

caudal femora by about the length of the head, rather broad, obliquely rotundato-truncate at the apex; intercalary vein proximad very close to the ulnar vein, mesad equidistant from the ulnar and median veins. Interspace between the mesosternal lobes subquadrate in the male, slightly transverse in the female; metasternal lobes with an extremely narrow interspace in the male, the interspace subquadrate in the female. Caudal femora more robust in the female than in the male, the greatest width contained three and one-half times in the length in the male, three times in the female.

Green Phase.-Head, pronotum, pleura, caudal femora, a longitudinal

bar on the medio-proximal portion of the tegmina, a median, and a costal premedian patch on the same apple-green; remainder of tegmina and venter brownish, the venter inclined toward raw umber, the sutural half of the tegmina mars-brown with a pattern of obsolete darker maculations, blending into the clove-brown areas on the costal half of the tegmina. Dorsum of the caudal femora marked with median, premedian and preapical patches of clove-brown, the median the largest and triangular in shape, the markings being placed in juxtaposition to clove-brown areas on the tegmina; ventral faces of the caudal femora black with two whitish bands, one median and the other preapical, genicular region clove-brown; caudal tibiæ glaucous, the genicular



Fig. 2.—*C h or*tophaga australior n. sp. Dorsal outline of head and pronotum of female type. (× 2.)

extremity clove-brown with a patellar spot of pale greenish and a broad complete yellowish-white annulus, spines yellowish with black tips; caudal tarsi pale ochraceous. Caudal margin of pronotal disk with a number of ill-defined dark blotches. Eyes umber, irregularly divided into two shades; antennæ mars-brown. Wings with the disk yellow.

Brown Phase.—Similar to the green phase except that the green of the latter is replaced with clay color, ochraceous or ochraceous-buff, much marked with clove-brown on the head, pronotum and pleura, and usually with a more or less distinct paler decussate pattern on the dorsum of the pronotum, the lateral lobes of the pronotum more r less striate cephalo-caudad with dark color.

# Measurements.

		3	Ŷ	
Length of body	18	mm.	$24.5 \mathrm{~n}$	ım.
Length of pronotum	-4.5	" "	6	
Greatest width of pronotum (disk)	3	" "	-4	
Length of tegmen	18	"	21.5	"
Length of caudal femur	12	" "	13.8	66

Considerably over a hundred specimens of this species have been examined by us in the past few years and the species shares the characters of *Chortophaga* and *Encoptolophus* to such an extent that the above synonym can be explained on that ground. It appears that the species replaces *C. viridifasciata* in at least the extreme southeastern part of the country ranging as far as known from Thomasville and Waynesville, Ga., south to Apalachicola, Miami, Chokoloskee and Key West. Its range probably meets that of *C. viridifasciata* in southcentral Georgia as we have seen the latter from Marshallville in that region. No doubt the references to *C. viridifasciata* from the region frequented by the new form will on the examination of the material prove to belong to *australior*. The species is known to us from the following material:

St. Simon's Island, Ga. September 9, 1909. Six males, seven females. (Coll. State of Georgia.)

Brunswick, Ga. April 6. Two females. (Coll. State of Georgia.) Waynesville, Ga. Five males, two females. (Coll. State of Georgia.) Thomasville, Ga. Ninety-two specimens (Hebard and Rehu). (A. N. S. P. and Hebard Coll.)

Bainbridge, Ga. July 15–27, 1909. (J. C. Bradley.) Six males, four females. (Coll. State of Georgia.)

Apalachicola, Fla. July 21–23, 1909. (J. C. Bradley.) One male, one female. (Coll. State of Georgia.)

Fernandina, Fla. September 12. One male.

Pablo Beach, Fla. August 11 and 12, 1905. (Hebard and Rehn.) Three males, four females. (A. N. S. P. and Hebard Coll.)

Jacksonville, Fla. August 11, 1905. (Hebard and Rehn.) One female. (Hebard Coll.)

Gainesville, Fla. August 17, 1905. (Hebard and Rehn.) One male. (Hebard Coll.)

Cedar Keys, Fla. August 15, 1905. (Hebard and Rehn.) One male. (Hebard Coll.)

Tampa, Fla. January 16 and 17, 1904. (Hebard.) Three specimens. (Hebard Coll.)

Chokoloskee, Fla. Four specimens. (A. N. S. P. and Hebard Coll.) Miami, Fla. January, February, July. Key West, Fla. January 18 and 19, 1904. (Hebard.) Thirty specimens. (A. N. S. P. and Hebard Coll.)

Individual variation in size is considerable in the species, this being equally noticeable in both sexes. Numerous slight modifications of the distribution, shape and intensity of the maculations are to be found in any considerable series and occasionally a green individual will exhibit a rusty red suffusion on the dorsum of the head and pronotum.

## Hippiscus phœnicopterus (Burm.).

Tallulah Falls. June 19–25, 1909. (J. C. Bradley.) Two males. Cornelia. July 17, 1909. One female.

Chickamauga, Ga. June 24–26, 1898. (H. L. Viereck.) Two females. (A. N. S. Phila.)

Chester. June 2 and 14, 1909. One male, one female.

This species has previously been recorded from five localities in northern Georgia (Trenton, Sand Mountain, Jasper, Bolton and Stone Mountain) and one in the extreme southern portion (Thomasville).

# Hippiscus rugosus (Seudder).

Dalton. August 29. Nine males, three females.

Bainbridge. July 15–27, 1909. (J. C. Bradley.) Six females. The wings of these specimens are yellow or some shade of red.

# Dissosteira carolina (Linnæus).

Austell. September 6. Two females.

Pomona. June 3 and 18, 1907. One male, one female.

Chester. June 2, 1904. One male.

#### Spharagemon bolli Scudder.

Tallulah Falls. June 19-August 8, 1909. Two males, one female.

## 1910.] NATURAL SCIENCES OF PHILADELPHIA.

#### Spharagemon cristatum Seudder.

Albany. May 6, 1902. One male.

This is the only Georgian record of the species, which is apparently rare east of the Mississippi. The only previous records from the southeastern States are from Dingo Bluffs, N. C., and Tallahassee, Fla.

# Spharagemon collare wyomingianum (Thomas).

Fernandina, Fla. One female.

The only previous record of this species from Florida is from Gainesville.

### Scirtetica picta (Scudder).

Chester, June 2, 1904. One male.

Albany. March 28 and May 6. One male, one female.

Lanark, Fla. July 20, 1909. One male.

These are the first specific references of the occurrence of the species in Georgia.

### Psinidia fenestralis (Serville).

St. Simon's Island. September 9, 1909. Eleven males, two females.

Waynesville. One male.

Bainbridge. July 15-27, 1909. (J. C. Bradley.) One male.

Brunswick, September, One male, (A. N. S. P.)

Fernandina, Fla. September 12. One female.

The only previous Georgia records were from Tybee Island and Thomasville.

## Trimerotropis citrina Scudder.

St. Simon's Island. September 9, 1909. One male, one female.

Waycross. September 10, 1909. One female.

Austell. September 6. One male, one female.

Chester. May 30-June 14, 1904. One male, six females.

Bainbridge. July 15–27, 1909. (J. C. Bradley.) One male, one female.

Apalachicola, Fla. July 21–23, 1909. (J. C. Bradley.) One male. The Waycross and Austell specimens are distinctly suffused with pale pinkish-red, while the remaining specimens are grayish or very pale ochraceous, the tegminal maculations occurring more or less distinctly in all the individuals.

The previous Georgia records for this species were from Tybee Island, Thomasville, Metcalfe, Marietta, Stone Mountain and Trenton.

## Trimerotropis saxatilis McNeill.

Stone Mountain. July 11, 1909. Two males.

This most interesting saxicolous species has been recorded from

but two localities in the eastern States—Stone Mountain and Sand Mountain, Ga., where Morse<sup>2</sup> found it frequenting the weathered surfaces of rocky ledges.

The two specimens before us are blackish in general color with the paler maculations of the ventral half of body and of the limbs very decided, the usual pale tegminal markings very dull, poorly contrasted and brownish in color.

#### Dictyophorus guttatus (Stoll).

Apalachicola, Fla. July 21–23, 1909. (J. C. Bradley.) Three males, two females.

One male and both of the females belong to the melanistic phase of the species.

Leptysma marginicollis (Serville).

Okefenokee Swamp. September 11. One male.

Fernandina, Fla. April 8.

The Okefenokee male is somewhat smaller than a male from Miami, Fla., being about equal in size to specimens of the same sex from Raleigh, N. C.

# Schistocerca obscura (Fabricius).

St. Simon's Island, Ga. September 8, 1909. Three males, one female.

Fernandina, Fla. September 12. One female.

These specimens agree fully with material from Gainesville and Pablo Beach, Fla.

## Schistocerca americana (Drury).

Atlanta. July 16, 1905. One male.

Waynesville. One male.

Tallulah Falls. June 19–25, 1909. (J. C. Bradley.) One male.

# Schistocerca damnifica (Saussure).

Atlanta. April 12. Four males, one female.

Chester. April 8, 1904. One male.

Albany. March 28, 1902. One male.

Waynesville. One female.

Brunswick. April 6, 1902. One male.

The Brunswick individual possesses quite long wings, these measuring 25 mm, in length to the body's 26.5 mm.

# Eotettix pusillus Morse.

Thomasville. December 3, 1903. Two females. (Morgan Hebard.) [Hebard Collection.]

594

<sup>&</sup>lt;sup>2</sup> Publ. No. 18, Carneg. Inst., Wash., pp. 15 and 37.

These specimens are perfectly typical of this species, previously known only from Waycross, Ga., and Denmark, S. C.

### Melanoplus propinquns Scudder.

St. Simon's Island. September 8-9, 1909. Two males.

Chester. June 14, 1904. One male, one female.

Bainbridge. July 15-27, 1909. (J. C. Bradley.) One female.

Paroxya atlantica Scudder.

St. Simon's Island. September 8–9, 1909. One male, three females.

#### Paroxya floridiana (Thomas).

Apalachicola, Fla. July 21–23, 1909. (J. C. Bradley.) One female.

Okefenokee Swamp. September 11. Four males, seven females.

These specimens are very similar in size to individuals from Pablo Beach, Fla.

## TETTIGONIDÆ.

#### Amblycorypha uhleri Stål.

Toccoa. August 15. Two males.

Tallapoosa. July 24, 1908. One male.

This species has previously been recorded from "Georgia" and Thomasville and Thompson's Mills, Ga.

Microcentrum rhombifolium (Saussure).

Atlanta. September 7, 1907. One male.

Microcentrum retinerve (Burmeister).

Austell. September 6. Three males.

This species is here for the first time recorded with exact data from Georgia.

# Orchelimum militare Rehn and Hebard.

Okefenokee Swamp. September 11-16. Two males, three females. This species was described from Gainesville, Fla., and is known to range to extreme southern North Carolina.

### Orchelimum glaberrimum (Burmeister).

Waynesville. One male.

This specimen has the reddish head seen in numerous specimens of the species. The only previous records from the State with exact locality were from Thomasville and Thompson's Mills.

# Orchelimum volantum McNeill.

Okefenokee Swamp. September 10. One female.

This specimen has previously been recorded only from Illinois.

Indiana and extreme southern Ontario. When compared with a female from Point Pelee, Ontario, the Okefenokee individual, while slightly larger, is seen to be identical with the exception of the slightly narrower ovipositor.

## Neoconocephalus retusus (Seudder).

Waycross. September 10, 1909. Four males, two females.

# Conocephalus fasciatus (De Geer).

Okefenokee Swamp. September 11. One female.

This locality and Thomasville are the only Georgia localities from which the species has been recorded.

# Atlanticus dorsalis (Burm.).

Tallulah Falls, June 19–25, 1909. One female. This is the only Georgia record for the species.

### GRYLLIDÆ.

#### Tridactylus apicalis Say.

Bainbridge. July 15–27, 1909. (J. C. Bradley.) Three specimens. This is the first exact record for the species from Georgia.

# Tridactylus terminalis Uhler.

Bainbridge. July 15–27, 1909. (J. C. Bradley.) Two specimens. This species has previously been recorded from Thomasville by the authors.

### Nemobius fasciatus socius<sup>3</sup> (Scudder).

Bainbridge. July 15-27, 1909. (J. C. Bradley.) One male, one female.

# Nemobius ambitiosus Scudder.

Bainbridge. July 15-27, 1909. (J. C. Bradley.) One male.

The only previous record of the occurrence of this species in Georgia was of its capture at Thomasville.

### Nemobius aterrimus Scudder.

Bainbridge. July 15-27, 1909. (J. C. Bradley.) Two males.

The only previous records of this species were from Jacksonville (type locality) and Tampa, Fla.

# Nemobius cubensis Saussure.

Bainbridge. July 15–27, 1909. (J. C. Bradley.) One male, one female.

The only previous exact Georgia record of this species was of its occurrence at Thomasville.

<sup>&</sup>lt;sup>3</sup> The record of *N. maculatus* from Thomasville, Ga., made by the present authors (*Proc. Acad. Nat. Sci. Phila.*, 1904, p. 799) is erroneous, as the specimens are brachypterous individuals of the present species.

1910.]

#### Nemobius palustris aurantius n. subsp.

1905. Nemobius carolinus Rehn and Hebard, Proc. Acad. Nat. Sci. Phila., 1904, p. 801. (Not of Scudder, 1877.)

Types;  $\bigcirc$  and  $\bigcirc$ ; Thomasville, Thomas County, Georgia. December 6, 1903. (In sphagnum swamp; M. Hebard.) [Hebard Collection.]

This form shows no constant structural difference to separate it from the more northern *palustris*, but a series of fourteen individuals of both sexes all agree in being most strikingly colored, quite distinct in this respect from true *palustris*. The new form has the head and pronotum ochraceous-rufous, the limbs almost uniform ochraceous and the tegmina shining black or brownish-black. The contrasting coloration is quite distinctive and varies but little in tone in the series. At the present time it seems best to regard *aurantius* as a form of *palustris*, although it may at some future date be shown to be worthy of specific rank.

The types measure as follows:

	O'	ę
Length of body	6.5 mm.	$7  \mathrm{mm.}$
Length of pronotum	1.2 "	1.5 "
Length of tegmen	3.8 "	3.2 "
Length of caudal femur	4.2 "	4.8 "
Length of ovipositor		3.5 "

## Gryllus firmus Scudder.

St. Simon's Island. September 8–9, 1909. Four males, three females.

This is the only Georgia record with exact data for the species.

### Gryllus rubens Scudder.

Chester. April 7–8, 1904. One male, one female, one nymph. Dalton. August 26. One male.

Bainbridge. July 15-27, 1909. (J. C. Bradley.) One male.

The only previous Georgia record of this species was from Thomasville.

# Miogryllus saussurei (Seudder).

Bainbridge. July 15–27, 1909. (J. C. Bradley.) One female. This species has been recorded from Roswell, Ga., and "Georgia" without exact locality.

# Œcanthus angustipennis Fitch.

Toccoa. August 15. One male.

The only previous Georgia record of this species is from Thompson's Mills (Allard).

#### Ecanthus quadripunctatus Beutenmüller.

Chester. June 14, 1904. One male, two females.

Atlanta. July 3, 1909. One male, one female.

This species has been recorded from Thompson's Mills and Thomasville, Ga.

# Cyrtoxipha columbiana Caudell.

598

Bainbridge, July 15-27, 1909. One male, one female.

The only previous Georgia record of this species is of its occurrence at Thompson's Mills.

#### Phylloscyrtus pulchellus (Uhler).

Bainbridge. July 15-27, 1909. (J. C. Bradley.) One female.

Toccoa. August 15. Five males, five females, two immature specimens.

The only previous exact record of this species in Georgia was of its occurrence at Thompson's Mills.